

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A chemical compound having the
general formula



in labelled or unlabelled form, or any of its enantiomers or any mixture thereof, or a pharmaceutically acceptable salt thereof;

wherein ~~-----~~ represents a single or a double bond;

R represents hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, a mono- or polycyclic aryl group, or aralkyl; and

~~R¹ represents a 5-membered heterocyclic group selected from the group consisting of 5-imidazolyl, 5-triazolyl, 2-pyrrolyl, 2-selenophenyl, 3-thiadiazolyl, 5-pyrazolyl, 5-isothiazolyl, 5-furazanyl; which heterocyclic groups may be substituted one or more times with substituents selected from the group consisting of halogen, amino, hydroxy, alkoxy, alkoxy-alkyl, alkoxy-alkoxy, sulfanyl, alkylsulfanyl, alkylsulfanyl-alkoxy, alkoxy-alkylsulfanyl, and alkylsulfanyl-alkylsulfanyl; or~~

~~R¹ represents a 6-membered heterocyclic group selected from the group consisting of 4-pyridazinyl, 4-pyrimidinyl, and 3-pyrazinyl; which heterocyclic groups may be substituted one or~~

~~more times with substituents selected from the group consisting of halogen, amino, hydroxy, alkoxy, alkoxy-alkyl, alkoxy-alkoxy, sulfanyl, alkylsulfanyl, alkylsulfanyl-alkoxy, alkoxy-alkylsulfanyl, and alkylsulfanyl-alkylsulfanyl; or~~

R¹ represents a bi-cyclic heterocyclic group selected from the group consisting of 5- or 6-benzimidazolyl, 5- or 6-benzofuranyl, 5- or 6-benzothiazolyl, 5- or 6-benzothieryl, 5- or 6-benzotrizolyl, 6- or 7-cinnolinyl, 5- or 6-indazolyl, 5- or 6-indoliziny, 5- or 6-indolyl, 5- or 6-isoindolyl, 6- or 7-isoquinolinyl, 6-phthalazinyl, 6- or 7-quinolinyl, 6- or 7-quinoliziny, and 6- or 7-quinoxalinyl; which heterocyclic groups may be substituted one or more times with substituents selected from the group consisting halogen, amino, hydroxy, alkoxy, alkoxy-alkyl, alkoxy-alkoxy, sulfanyl, alkylsulfanyl, alkylsulfanyl-alkoxy, alkoxy-alkylsulfanyl, and alkylsulfanyl-alkylsulfanyl.

2-10. (Cancelled)

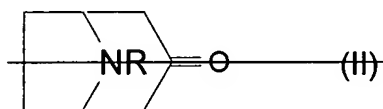
11. (Previously Presented) The chemical compound of claim 1, wherein R¹ represents a bi-cyclic heterocyclic group selected from the group consisting of 5- or 6-benzimidazolyl, 5- or 6-benzofuranyl, 5- or 6-benzothiazolyl, 5- or 6-benzothieryl, 5- or 6-benzotrizolyl, 6- or 7-cinnolinyl, 5- or 6-indazolyl, 5- or

6-indolizinyl, 5- or 6-indolyl, 5- or 6-isoindolyl, 6- or 7-isoquinolinyl, 6-phthalazinyl, 6- or 7-quinolinyl, 6- or 7-quinolizinyl, and 6- or 7-quinoxalinyl; which heterocyclic groups may be substituted one or more times with substituents selected from the group consisting of halogen, amino, hydroxy, alkoxy, alkoxy-alkyl, alkoxy-alkoxy, sulfanyl, alkylsulfanyl, alkylsulfanyl-alkoxy, alkoxy-alkylsulfanyl, and alkylsulfanyl-alkylsulfanyl.

12-25. (Cancelled)

26. (Currently Amended) A method for the preparation of the compounds according to claim 1, which method comprises

A) ~~the step of reacting a compound having the formula~~



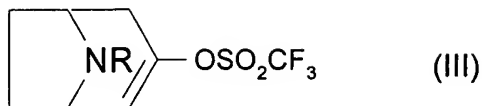
~~wherein R is as defined in claim 1,~~

~~with a compound of the formula $R^1\text{-Li}$,~~

~~wherein R^1 is as defined in claim 1,~~

~~followed by dehydration of the compound obtained; or~~

B) the step of reacting a compound having the formula



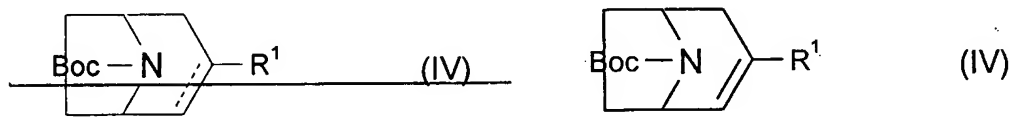
wherein R is as defined in claim 1,

with a compound of formula R^1-X ,

wherein R^1 is as defined in claim 1,

and X represents halogen, boronic acid, or trialkylstannyl; or

EB) the step of reducing a compound having the formula



wherein R^1 is as defined in claim 1.

27-38. (Cancelled)

39. (Previously Presented) A compound selected from the group consisting of: ~~of claim 11 which is~~

(±)-3-[6-Isoquinolinyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[6-Quinolinyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[7-Isoquinolinyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[7-Quinolinyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-H-5-Benzimidazolyl]-8-methyl-8-
azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-H-6-Benzimidazolyl]-8-methyl-8-
azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-H-5-Benzotrizolyl]-8-methyl-8-
azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-H-6-Benzotrizolyl]-8-methyl-8-
azabicyclo[3.2.1]oct-2-ene;

(±)-3-[2-Amino-1-H-5-benzimidazolyl]-8-methyl-8-
azabicyclo[3.2.1]oct-2-ene;

(±)-3-[2-Amino-1-H-6-benzimidazolyl]-8-methyl-8-
azabicyclo[3.2.1]oct-2-ene;

(±)-3-[6-phthalazinyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-
ene;

(±)-3-[5-Benzofuranyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-
ene;

(±)-3-[6-Benzofuranyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-
ene;

(±)-3-[5-Benzothienyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-
ene;

(±)-3-[6-Benzothienyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-
ene;

(±)-3-[5-Benzothiazolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-
ene;

(±)-3-[6-Benzothiazolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-Methyl-5-indolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-Methyl-6-indolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[5-Indoliziny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[6-Indoliziny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[2-Methyl-5-isoindolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[2-Methyl-6-isoindolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-Methyl-5-indazolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[1-Methyl-6-indazolyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[6-Quinoliziny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[7-Quinoliziny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[6-Cinnoliny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[7-Cinnoliny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

(±)-3-[6-Quinoxaliny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene; or

(±)-3-[7-Quinoxaliny]-8-methyl-8-azabicyclo[3.2.1]oct-2-ene;

or a pharmaceutically acceptable addition salt thereof.